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CLAIMS:

1. Means for driving at least one bristle carrying shaft of a toothbrush, comprising:

- two driving arms, wherein each driving arm is arranged such as to be rotatable about a rotation axis which is situated at one end of the driving arm; and
- at least one arm actuating member for bringing about reciprocating rotational movements of the driving arms in opposite rotational directions.
 - 2. Driving means according to claim 1, comprising:
 - a rotatably arranged cam having an even number of lobes; and
- 10 biasing means for biasing the driving arms against opposite sides of the cam.
 - 3. Driving means according to claim 2, wherein a roller for contacting the cam is rotatably arranged at an end of each driving arm, which end is opposite to the end where the rotation axis about which the driving arm is rotatable is located.

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- 4. Driving means according to claim 2 or 3, comprising an electric motor having a drive shaft, wherein the cam is arranged at the drive shaft of the electric motor.
- 5. Driving means according to claim 1, comprising an electric coil for
 20 encompassing a substantial portion of the driving arms, wherein the driving arms comprise metal, preferably soft-iron.
 - 6. Driving means according to claim 1, wherein a metal core portion is arranged at an end of each driving arm, which end is opposite to the end where the rotation axis about which the driving arm is rotatable is located, the driving means comprising an electric coil for encompassing a substantial portion of the metal core portions.
 - 7. Driving means according to claim 5 or 6, wherein biasing means are provided for biasing the driving arms towards each other.

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- 8. Driving means according to claim 1, comprising an electric coil encompassing a metal core, wherein the driving arms are arranged at both ends of the core.
- 5 9. Driving means according to claim 8, wherein biasing means are provided for biasing the driving arms away from each other.
 - 10. Driving means according to claim 1, wherein a magnet is arranged at an end of each driving arm, which end is opposite to the end where the rotation axis about which the driving arm is rotatable is located, the driving means comprising an electric coil, wherein the magnets are positioned on both sides of the coil.
 - 11. Driving means according to any of claims 1-10, wherein the rotation axes about which the driving arms are rotatable coincide.

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- 12. Toothbrush, comprising:
- at least one bristle carrying shaft which is arranged such as to be rotatable about its longitudinal central axis;
- at least one bristle which is arranged at an end of the at least one bristle carrying shaft, and which is intended for contacting teeth of a user of the toothbrush; and
- driving means according to any of claims 1-11, wherein the at least one bristle carrying shaft is associated to a driving arm of the driving means.
- 13. Toothbrush according to claim 12, wherein the longitudinal central axis of the25 at least one bristle carrying shaft coincides with the rotation axis about which the associated driving arm is rotatable.
 - 14. Toothbrush according to claim 12 or 13, comprising two bristle carrying shafts and two bristles, wherein the bristles are arranged such that one bristle is a continuation of the other bristle.
 - 15. Toothbrush according to any of claims 12-14, comprising two bristle carrying shafts, wherein the longitudinal central axes of the bristle carrying shafts coincide.

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- 16. Toothbrush according to any of claims 12-15, wherein the at least one bristle carrying shaft is supported by a slide bearing.
- Toothbrush according to any of claims 12-15, wherein the at least one bristle
 carrying shaft is supported by a deformable elastic bearing, which is fixedly connected to the at least one bristle carrying shaft.